



## OWNER'S MANUAL

### 7909

FM/AM Compact Disc Player

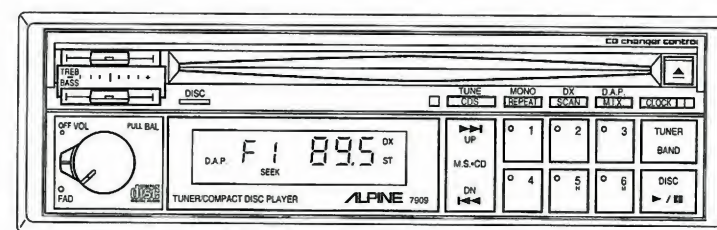
# ALPINE

SERIAL NUMBER: \_\_\_\_\_  
INSTALLATION DATE: \_\_\_\_\_  
INSTALLATION TECHNICIAN: \_\_\_\_\_  
WHERE PURCHASED: \_\_\_\_\_

Alpine Electronics of America, Inc.  
19145 Gramercy Place, Torrance,  
California 90501, U.S.A.  
Tel: 1-800-ALPINE-1 (1-800-257-4631)

Alpine Electronics of Canada, Inc.  
Suite 203, 7300 Warden Ave. Markham,  
Ontario L3R 9Z6, Canada  
Tel: 1-800-ALPINE-1 (1-800-257-4631)

68P91508W59-O  
Printed in Japan (S)



COMPACT  
disc  
DIGITAL AUDIO

## POINTS TO OBSERVE FOR SAFE USAGE

### **Warning**

#### **DO NOT DISASSEMBLE OR ALTER**

Attempts to disassemble or alter may lead to an accident, fire and/or electric shock.

#### **KEEP SMALL ARTICLES OUT OF THE REACH OF CHILDREN**

Store small articles (screws, etc.) in places not accessible to children. If swallowed, consult a physician immediately.

#### **USE THE CORRECT AMPERE RATING WHEN REPLACING FUSES**

Replace fuses only with fuses of the same ampere rating. Failure to do so may result in a fire and/or damage to the vehicle.

#### **HALT USE IMMEDIATELY IF A PROBLEM APPEARS**

When problems appear, stop using the system immediately and contact the dealer from whom you purchased the equipment. Some problems which may warrant immediate attention include a lack of sound, noxious odors or smoke being emitted from the unit, or foreign objects dropped inside the unit.

#### **USE ONLY IN CARS WITH A 12 VOLT NEGATIVE GROUND**

Use only in cars with a 12 volts negative (–) ground. (Check with your dealer if you are not sure.) Failure to do so may result in fire, etc.

#### **BEFORE WIRING, DISCONNECT THE CABLE FROM THE NEGATIVE BATTERY TERMINAL**

Before doing any electrical wiring, disconnect the cable from the negative (–) terminal of the battery. Failure to do so may result in electric shock or injury due to electrical shorts.

## POINTS TO OBSERVE FOR SAFE USAGE

### **KEEP ELECTRICAL CABLES TOGETHER TO AVOID OPERATING HAZARDS**

Arrange wiring and cables in compliance with the installation manual to prevent obstructions when driving. Cables or wiring that obstructs or hangs up on places such as the steering wheel, gear lever, brake pedals can be extremely hazardous.

### **DO NOT CUT AWAY THE WIRE SHEATH AND USE POWER TO OTHER EQUIPMENT**

Never cut away the cable shielding to use power to another piece of equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.

### **DO NOT INSTALL IN LOCATIONS WHICH MIGHT HINDER VEHICLE OPERATION**

Do not install in locations which might create hazards for the vehicle occupants or hinder vehicle operation (such as the steering wheel or gear shift) by obstructing forward vision or hampering movement etc.

## POINTS TO OBSERVE FOR SAFE USAGE

### **Caution**

#### **DO NOT RAISE THE VOLUME EXCESSIVELY**

Keep the volume at a level where you can still hear outside noises while driving. Driving while unable to hear outside sounds could cause an accident.

#### **DO NOT USE THIS EQUIPMENT OUTSIDE THE VEHICLE**

Do not use this equipment for purposes other than those listed for a vehicle. Failure to do so may result in an electric shock or an injury.

#### **KEEP FOREIGN OBJECTS OUT OF THE CD COMPARTMENT SLOT**

Keep any foreign objects, including fingers, out of the CD compartment slot.

#### **STOP THE VEHICLE BEFORE CARRYING OUT ANY OPERATION THAT COULD INTERFERE WITH YOUR DRIVING**

If loading or unloading a CD interferes with your driving, stop the vehicle in a safe location before attempting operation.

#### **HAVE THE WIRING AND INSTALLATION DONE BY EXPERTS**

The wiring and installation of this unit requires special technical skill and experience. To ensure safety, always contact the dealer where you purchased this unit to have the work done.

#### **USE SPECIFIED ACCESSORY PARTS AND INSTALL THEM SECURELY**

Be sure to use only the specified accessory parts. Use of other than designated parts may damage this unit internally or may not securely install the unit in place as parts that come loose can create hazards.



## SPECIFICATIONS

### COMPACT DISC PLAYER

System .....	Optical (compact disc system)
Number of Quantization Bits .....	18-bit linear system
Sampling Rate .....	352.8 kHz (8X)
Channels .....	2-channels stereo
Number of D/A Converters .....	2
Frequency Response .....	5 – 20,000 Hz +0, -0.3 dB
Wow & Flutter (% WRMS) .....	Below measurable limits
Total Harmonic Distortion .....	0.002% (at 1 kHz)
Dynamic Range .....	100 dB (at 1 kHz)
Signal-to-Noise Ratio .....	110 dBA
Channel Separation .....	95 dB (at 1 kHz)

### FM TUNER

Tuning Range .....	87.7 – 107.9 MHz
Mono Usable Sensitivity .....	16.3 dBf (1.8 $\mu$ V/75 ohms)
50 dB Quieting Sensitivity .....	20.7 dBf (3.0 $\mu$ V/75 ohms)
Alternate Channel Selectivity .....	80 dB
S/N (signal-to-noise) Ratio .....	60 dB
Stereo Separation .....	35 dB
Capture Ratio .....	2.0 dB
AM Suppression .....	45 dB

### AM TUNER

Tuning Range .....	530 – 1,620 kHz
Sensitivity .....	10 $\mu$ V

### GENERAL

Power Requirement .....	14.4V DC (11 – 16V allowable)
Output Voltage (at Volume Center) .....	500 mV/10k ohms
Bass .....	$\pm$ 18 dB at 30 Hz
Treble .....	$\pm$ 15 dB at 15 kHz
Weight .....	1.8 kg (3 lbs. 15 oz)

### CHASSIS SIZE

Width: 178mm (7"), Height: 50mm (2"), Depth: 153mm (6")

### NOSEPIECE SIZE

Width: 171 mm (6-3/4"), Height: 48mm (1-7/8"), Depth: 15mm (19/32")

**NOTE:** Due to product improvement, specifications and design are subject to change without notice.

## POINTS TO OBSERVE FOR SAFE USAGE

### DO NOT INSTALL IN LOCATIONS WITH HIGH MOISTURE OR DUST

Avoid installing the unit in locations with high incidence of moisture or dust. Moisture or dust that penetrates into this unit may cause smoke or fire.

### MAKE THE CORRECT CONNECTIONS

Failure to make the correct connections can cause fire or accident to occur.

### ARRANGE THE WIRING SO IT IS NOT CRIMPED OR PINCHED

Route the cables and wiring so as not be crimped by moving parts like seat rail or make contact with sharp or pointed spots which might damage the wiring.

---

\* When playing 3-inch CDs in the 7909, do not use an adaptor ring. Adaptor rings may become stuck inside the player and damage the mechanism.

### \* Irregular Shaped Discs

Make sure the discs you use in this unit do not have any irregularities. The outer and inner edges should be round and smooth. Use of irregularly shaped discs may cause damage to the mechanism.

## INTRODUCTION

The 7909 is Alpine's audiophile compact disc player and FM/AM digital PLL synthesizer tuner combined in one DIN-sized chassis. It incorporates the most refined CD laser pickup and transport in mobile audio, along with Alpine's famous T-10 II tuner which provides exceptionally stable reception, excellent signal-to-noise characteristics and ultra-wide frequency response. It includes the controls which allow direct interface with Alpine's compact disc changers CHM-S601 or CHA-S604. The 7909 allows for ultimate single play CD reproduction and the convenience of multi-disc playback for any system configuration you desire. Please read this manual thoroughly to familiarize yourself with each control and function. We, at Alpine, hope you have many years of enjoyment from your 7909.

## CONTENTS

POINTS TO OBSERVE FOR SAFE USAGE .....	2 - 5
INTRODUCTION .....	6
FEATURES .....	7
CONTROLS AND INDICATORS .....	8 & 9
OPERATION	
BASIC OPERATION .....	10 & 11
CLOCK OPERATION .....	11
TUNER OPERATION .....	11 - 14
CD OPERATION .....	14 - 16
CD CHANGER OPERATION .....	17
INSTALLATION .....	18 & 19
CONNECTIONS .....	20 & 21
IMPORTANT NOTICE .....	22
PRECAUTIONS .....	22
PROPER CARE OF YOUR DISC .....	23
IN CASE OF DIFFICULTY .....	24 - 26
INDICATION FOR CD SHUTTLE .....	27
SPECIFICATIONS .....	28

## INDICATION FOR CD SHUTTLE

INDICATION	CAUSE	SOLUTION
E-01	Disc-change malfunction.	Consult your Alpine dealer.
E-02	Disc is in the changer mechanism.	Press the magazine eject button, and insert an empty magazine.
E-03 E-04 E-05	Disc-change malfunction.	If the code disappears within a few seconds, the unit is OK. If not, consult your Alpine dealer.
E-06	Disc-change malfunction.	Press the magazine eject button and pull out the magazine. Check for no error indication. Try again. If the magazine cannot be pulled out, consult your Alpine dealer.
E-07	Magazine ejection impossible.	Press the magazine eject button. If the magazine does not eject, consult your Alpine dealer.
E-30	High temperature.	Will disappear when the temperature returns to operation range.
EEEE	Incorrect connection or disconnection of the CD changer.	Check connection between the CD changer and the control unit.
----	No CD magazine in the CD changer.	Insert the CD magazine.
no-2	No CD at No. 2 slot of the CD magazine.	Insert a CD into the No. 2 slot of the CD magazine.



## IN CASE OF DIFFICULTY

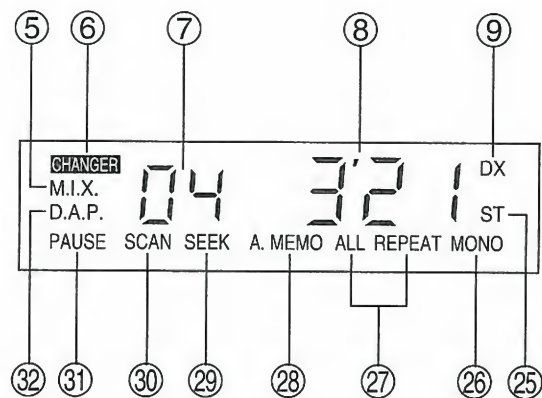
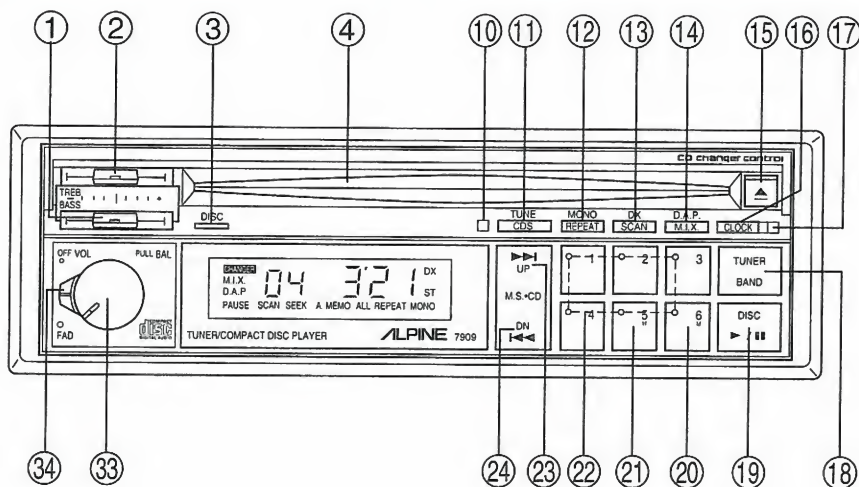
### CD CHANGER MODE (when used with the Alpine CHA-S604 or CHM-S601)

No CD functions.	DIN Control cable not connected.	Make sure the cables for control and audio have been properly connected per the CD Changer manual.
	The CD magazine has not been inserted.	Install the magazine with at least one CD inserted.
Music skips excessively.	The CD Changer has not been mounted securely.	Follow the installation instructions in the CD Changer manual for proper installation.
	The transit screws were not removed before installation.	Remove the Transit Screws and reinstall the changer.
	The mounting angle of the CD Changer is excessive.	Remount the CD Changer according to the directions given in the installation manual.
	The CD being played is dirty.	Clean the CD being very careful not to scratch it.
	The CD being played is damaged.	If the CD in question is cracked or warped, discard it as it could cause damage to the CD mechanism; if the CD is scratched at one selection only, skip that selection using the Music Sensor function to play the remaining selections.
Playback of 3" discs does not work.	The 3" adaptor ring is not being used.	Place the 3" adaptor ring onto the disc before inserting into the CD magazine.

## FEATURES

- **FULL FRONT DIN™**
- **CD CHANGER CONTROLS** (when used with the Alpine CHM-S601 or CHA-S604)
- **DUAL PRE-AMP OUTPUTS**  
This allows you to easily expand your system by providing Front and Rear Preamp Outputs and a Pre-Amp Fader.
- <**COMPACT DISC PLAYER FEATURES**>
  - **8 TIMES OVERSAMPLING DIGITAL FILTER**
  - **18-BIT, DUAL DIGITAL-TO-ANALOG CONVERTERS**
  - **POWER LOADING/SELF LOADING**  
The mechanism gently pulls the partially inserted compact disc into the play position and begins playback.
  - **MUSIC SENSOR UP/DOWN**  
For locating the beginning of the next track (up), or the track currently in playback (down).
  - **FAST FORWARD/FAST BACKWARD**
  - **M.I.X.**  
When the M.I.X. button is pressed, the microprocessor inside the 7909 will randomly select tracks for playback. After all tracks have been played, the M.I.X. feature will go into the Repeat Mode and begin again.
  - **C.D.S. (Compact Disc Straight)**  
Pressing the CDS button bypasses the tone and balance control circuits to play back very clear, natural and dynamic CD sound. This ensures that fewer analog components will contribute to the noise level of the digital-to-analog conversion.
  - **REPEAT**
  - **3-INCH DISCS**  
This unit plays 3-inch compact discs without using an adaptor ring.
  - **EJECT AUTO-LOCK**  
This locks the laser mechanism when a disc is ejected.
  - **DISC SCAN**  
Locates the beginning of each track and plays the first 10 seconds.
  - **ELECTRONIC EJECT/RELOAD**
  - **PAUSE**
- <**RADIO FEATURES**>
  - **T-10 II TUNER**  
Alpine's premier tuner utilizes a number of innovations to ensure stable, noise-free FM reception in both strong and weak signal areas.
  - **A. MEMO (AUTO MEMORY)**  
In the Auto Memory mode, the 6 strongest FM or AM stations will be stored automatically.
  - **D.A.P. (DIRECT ACCESS PRESET)**  
D.A.P. allows the storage of AM and FM presets on the same band, eliminating the need to press the TUNER/BAND button. Up to 6 FM and AM stations can be mixed in the D.A.P. Band.
  - **ETR/PLL DIGITAL FREQUENCY SYNTHESIZER**
  - **LITETOUCH™ 24-STATION PRESETS**  
6 FM1, 6 FM2, 6 AM, 6 D.A.P.

## CONTROLS AND INDICATORS



## IN CASE OF DIFFICULTY

### RADIO MODE

Unable to receive stations.	No Antenna or open connection in cable.	Make sure the antenna is properly connected; replace the antenna or cable if necessary.
Unable to tune station in the Seek mode.	You are in a weak signal area.	Make sure the tuner is in the DX mode.
	If the area you are in is not known to be a weak signal area, the antenna may not be grounded and connected properly.	Check your antenna connections; make sure the antenna is properly grounded at its mounting location.
	The antenna may not be the proper length.	Make sure the antenna is fully extended; if broken replace the antenna with a new one.
Broadcast is noisy.	The antenna is not the proper length.	Extend the antenna fully; replace it if it is broken.
	The antenna is poorly grounded.	Make sure the antenna is grounded properly at its mounting location.
	The station you are listening to is weak or susceptible to multipath interference.	Press the MONO button to place the tuner into the Mono mode until you change stations or the signal improves.

### CD MODE

CD insertion not possible.	There is a CD already in the transport.	Eject the CD in the transport and remove it.
	The CD is being improperly inserted.	Make sure the CD is being inserted per instruction in the Owner's Manual.
Unable to Fast-Forward or Rewind; Fast-Forward or Rewind is very slow.	The CD has been damaged.	Eject the CD and discard; using a damaged CD in your unit can cause damage to the transport.
Sound skips due to vibration.	Improper mounting. Disc is very dirty. Disc has scratches.	Securely re-mount the unit. Clean the disc. Change the disc.
Sound skips without vibration.	Dirty or scratched disc.	Clean the disc: damaged discs should be replaced.



## IN CASE OF DIFFICULTY

If you encounter a problem, please review the items in the checklist below. This guide will help you isolate the problem if the head unit is at fault. Otherwise, make sure the rest of your system is properly connected or consult your authorized Alpine dealer.

### INITIAL TURN-ON

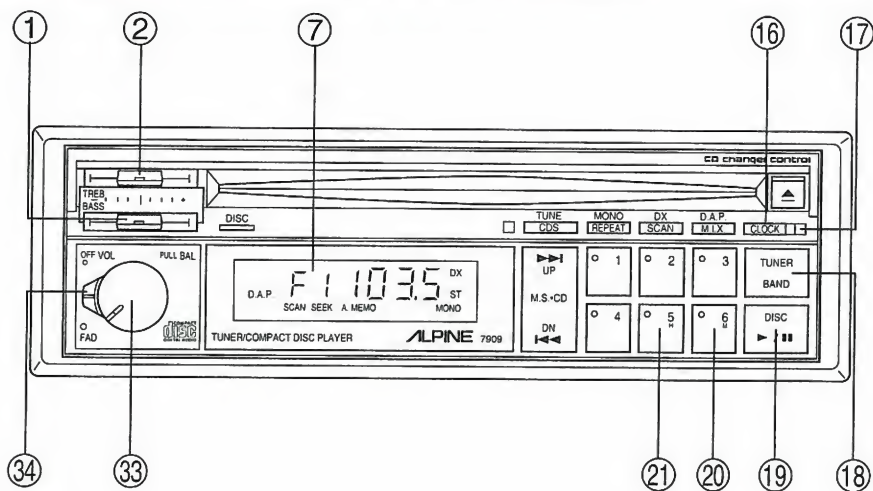
No function or display.	Car's ignition is off.	If connected per instructions, the unit will not operate with the car's ignition off.
	Power Switch is off.	With the car's ignition on, turn the VOLUME Control clockwise to turn the power on.
	Improper Connection of power leads.	Check connections of the power leads.
	Blown Fuse.	Check the fuses on the Ignition and Battery leads; replace with the proper value if necessary.
Functions OK but no sound.	Volume level too low.	Turn the VOLUME Control clockwise to desired level.
	Processors or Amplifiers not turning on.	Make sure Remote Turn-On Lead is connected properly; make sure processors and amplifiers are properly wired.
CD not functioning.	Out of operating temperature range +50°C (+120°F) for CD.	Allow the temperature of the car's interior (or trunk) to cool.
	Moisture condensation in the CD Module.	Allow the enough time for the condensation to evaporate (about 1 hour).

## CONTROLS AND INDICATORS

Listed below are all the Controls and their Indicators. Please see the Operation Section for explanations.

- ① BASS Control
- ② TREBLE Control
- ③ DISC Indicator
- ④ Disc Slot
- ⑤ M.I.X. Indicator
- ⑥ CHANGER Indicator
- ⑦ Band Indicator/Disc Track No. Indicator
- ⑧ Digital Indicator/Disc Elapsed Time Indicator
- ⑨ DX (Distance) Indicator
- ⑩ C.D.S. (Compact Disc Straight) Indicator
- ⑪ TUNE Button/CDS Button
- ⑫ MONO Button/REPEAT Button
- ⑬ DX (Local/Distance) Button/SCAN Button
- ⑭ D.A.P. Button/M.I.X. Button
- ⑮ Eject (Reload) Button
- ⑯ CLOCK Button
- ⑰ Reset Switch
- ⑱ TUNER/BAND Button
- ⑲ DISC (Play/Pause) Button
- ⑳ Minute Button
- ㉑ Hour Button
- ㉒ Station Preset and Direct Disc Access Buttons/Indicators
- ㉓ M.S./CD UP (▶▶) Button
- ㉔ M.S./CD Down (◀◀) Button
- ㉕ STereo Indicator
- ㉖ MONO Indicator
- ㉗ ALL/REPEAT Indicators
- ㉘ A. MEMO Indicator
- ㉙ SEEK Indicator
- ㉚ SCAN Indicator
- ㉛ PAUSE Indicator
- ㉜ D.A.P. Indicator
- ㉝ Power Switch/VOLUME Control/BALANCE Control (Pull)
- ㉞ FADER Control

## OPERATION



### <BASIC OPERATION>

#### Initial System Set-up

When operating for the very first time after installation of the unit or replacement of the car battery, press the Reset switch ①⑦ with a mechanical pencil or other pointed object.

#### Power Switching and Volume Control ③③

Rotating the Power switch ③③ clockwise turns power ON and continuously increases the volume. Rotating the control counterclockwise will continuously decrease the volume, and turn the Power OFF.

**Note:** The noise level on compact discs is much lower than on analog-type records or tapes; therefore, when inserting a disc, keep the volume control turned fully counterclockwise, then adjust volume by gradually turning the control clockwise once playback begins. Do not turn clockwise abruptly as the excessive power could damage the speakers.

#### Balance Control ③③

Pull on the VOLume control ③③ and rotate to balance between left and right speakers.

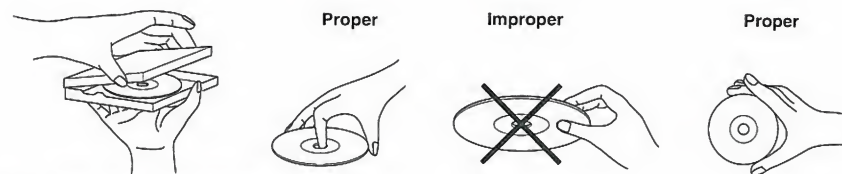
#### Fader Control ③④

Rotate the FADer control ③④ for your desired front to rear volume balance.

## PROPER CARE OF YOUR DISC

### ● Proper Handling

Handle your disc as shown. Do not drop the disc while handling. Hold the disc so you will not leave fingerprints on the surface. If the surface is scratched, it may cause the pickup to skip during playback. Do not affix tape, paper, or gummed labels on the disc. Do not write on the disc.



### ● Keep Your Discs Clean

Fingerprints, dust, or soil on the surface could cause the pickup to skip when trying to read information. For routine cleaning, wipe the playing surface with a clean, soft cloth from the center of the disc to the outer edge. If the surface is heavily soiled, dampen a clean soft cloth in a solution of mild neutral detergent before cleaning the disc. (Fig. A)

### ● Damaged Disc

Do not attempt to play cracked, warped, or otherwise damaged discs. Playing a bad disc could severely damage the playback mechanism.

### ● Storage

When not in use, place your discs in their individual case and store them in a cool place away from the sun, heat, and dust.

● Do not grip or pull out the disc while the disc is being pulled back into the player by the automatic Reloading mechanism. (Fig. B)

● Do not pull the unit out from the dash immediately after a disc is inserted or the Eject button has been pressed. If the unit is pulled out before an operation is completed, the disc will be unstable in the unit and may be damaged. Do not attempt to insert a disc into the unit when the power is off or while the unit is out of the dash.



Fig. A

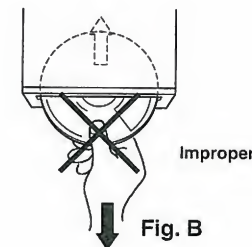


Fig. B



## IMPORTANT NOTICE

This compact disc player has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules. This equipment generates and uses radio frequency energy, and it must be installed and used properly in accordance with the manufacturer's instructions.

## PRECAUTIONS

- \* When your car is parked for a long period of time during the summer or winter, the temperature inside the car fluctuates greatly. Be sure the temperature inside the vehicle is between +60°C (+140°F) and -10°C (+14°F) before attempting to play a disc. When the temperature is over +140°F (+60°C), the protection circuit functions to stop the CD player, and "- - H" is displayed.
- \* Be sure to eject the disc from the player before removing the unit from the bracket. The disc must be ejected to activate the EJECT AUTO-LOCK feature. This will protect the laser mechanism while the unit is being transported.

### Moisture Condensation

You may notice the playback sound wavering. When this happens, remove the disc from the player and wait about an hour or until the moisture evaporates and the sound becomes normal.

### Cautions During Playback

Playing a disc while driving on a very bumpy road may result in skipping, but this will not scratch the disc or damage the player.

#### Notes:

1. Your player accepts only one disc at a time for playback. Do not attempt to load more than one disc.
2. Make sure the label side is facing up when you insert the disc. Your player will automatically eject any disc that is inserted incorrectly. If the player continues to eject a correctly inserted disc, push the Reset switch ⑰ with a pointed object such as a mechanical pencil.
3. To use 3-inch CDs in this player, you need not to use the 3-inch CD adaptor ring.

## OPERATION

### Separate Bass and Treble Controls (①, ②)

Slide these controls to the right to increase, and to the left to decrease the level of Bass or Treble.

### Function Switching

1. Tuner Mode  
With no disc loaded, the unit is normally in the tuner mode. Press the TUNER button ⑱ to switch from CD to Radio.
2. CD Mode  
When a disc is loaded, the unit automatically goes into the CD mode. Press the DISC ►/II button ⑲ to switch from Radio to CD.

### Cautions During CD Playback

Playing a disc while driving on a very bumpy road may result in skipping but this will not scratch the disc or damage the player.

- Notes:**
1. Your player accepts only one disc at a time for playback. Do not attempt to load more than one disc.
  2. Make sure the label side is facing up, when you insert the disc. Your player will automatically eject any disc that is inserted incorrectly. If the player continues to eject a correctly inserted disc, push the Reset switch ⑰ with a pointed object such as an ever-sharp pencil.
  3. You can play 3-inch CDs in this player without using an adaptor ring.
  4. Make sure your discs are labeled as shown below:



### <CLOCK OPERATION>

1. Turn the power off or press the CLOCK button ⑳ during the radio or CD play mode to display the time.
2. To adjust the "Hour", press and hold the CLOCK button ⑳ and press the Hour button ㉑ to advance the hours.
3. To adjust the "Minutes", press and hold the CLOCK button ⑳ and press the Minute button ㉒ to advance the minutes.

### <TUNER OPERATION>

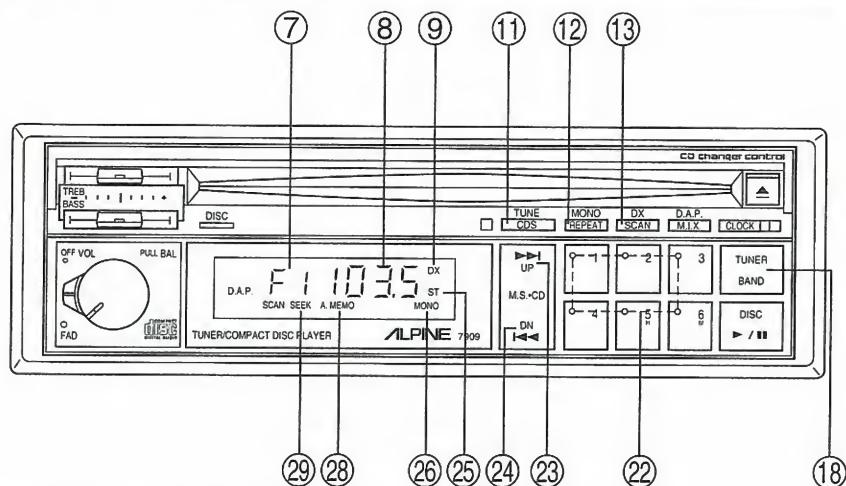
Turn the power on and set the unit to the tuner mode.

### Band Selector Switch

Press the BAND button ㉓ to select the desired tuning band. The Band indicator ㉔ shows your selection.

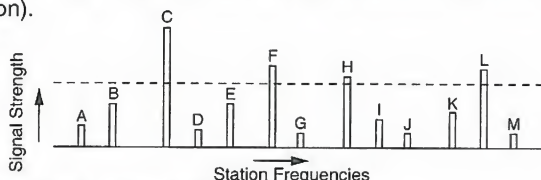


## OPERATION



### Local/Distance (DX) Seek Sensitivity for FM and AM

You can select the radio SEEK sensitivity (local or distance (DX)) by pressing the DX button 13. In the distance mode, with DX indication 9, the radio tunes in both strong and weak stations (all stations from A to M in the illustration). In the local mode, with no DX indication 9, the radio tunes in only strong stations (stations C, F, H and L in the illustration).



### FM Stereo/Monaural Switching

You can select the Stereo/Monaural – the Auto Switching or Monaural mode for FM receiving by pressing the MONO button 12. In the Auto Switching mode, you can receive stereo broadcasting in Stereo, and monaural broadcasting in MONO. The STereo 25 or MONO 26 indicator shows your reception mode. In the Monaural only mode, you will always receive the broadcast in monaural even if the broadcast is stereo. The Monaural only mode quiets the noisy stereo signal of weaker broadcasts. The STereo indicator will not appear while the Monaural only mode is selected.

### Manual Tuning

1. Press the TUNE button 11 until the SEEK 29 and A. MEMO 28 indicators disappear in the display.
2. To select the tuning band, press the BAND button 18. The Band indicator 7 shows your selection.

## CONNECTIONS

This unit is designed for 12-volt DC negative ground operation. Check to be sure that your vehicle has this type of system before connecting the power cable.

- **Front Output RCA Connectors (Labeled LINE OUT FRONT)**  
RED is Right and WHITE is Left.

- **Rear Output RCA Connectors (Labeled LINE OUT REAR)**  
RED is Right and WHITE is Left.

- **Input DIN Connector B**  
Connect this DIN connector to the DIN connector of the CHA-S604 or CHM-S601 CD changer.

**Note:** CHA-S604 is connected by using CD Shuttle DIN/RCA Adaptor (4913).

- **Input RCA Connectors (Labeled TO CHANGER)**  
RED is Right and WHITE is Left.

**Note:** CHA-S604 is connected by using CD Shuttle DIN/RCA Adaptor (4913).

- **Antenna Receptacle**
- **Input RCA Connectors (Labeled LINE IN)**
- **Dimmer Control Lead (WHITE/BLUE)**

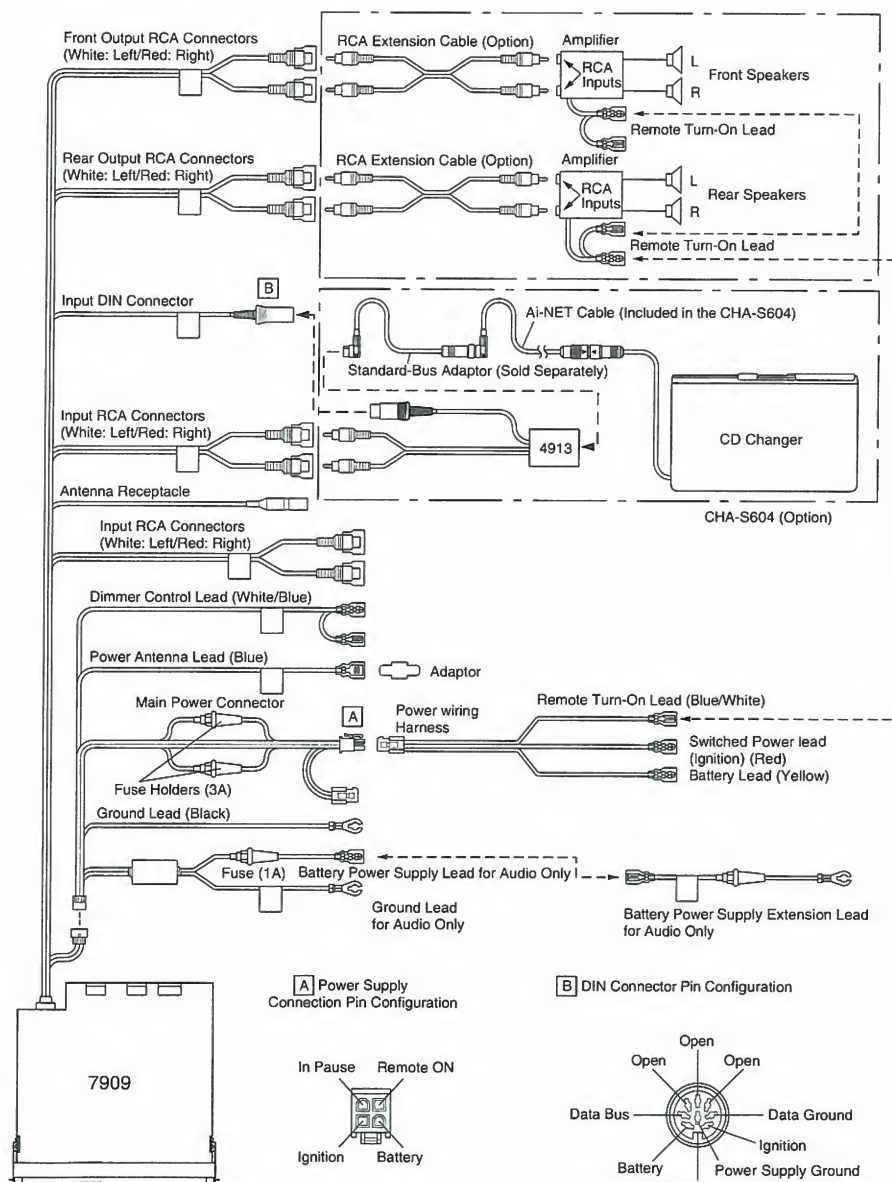
This lead is for connection to a rheostat such as the dashboard light dimmer in your vehicle. Applying (+)12V to this lead causes the maximum dimming. Varying the voltage controls the brightness of the display. This allows you to dim the unit's display with the dashboard lights.

- **Power Antenna Lead (BLUE)**  
When used with a power antenna, connect to the +B terminal of the power antenna.
- **Main Power Connector A**  
Connect to the Power Wiring Harness.
- **Power Wiring Harness**  
Connect the BLUE/WHITE, RED, and YELLOW leads as described below.
- **Remote Turn-On Lead (BLUE/WHITE)**  
Connect this lead to the remote turn-on lead of your amplifier or signal processor.
- **Switched Power Lead (Ignition) (RED)**  
Connect this lead to an open terminal on the vehicle's fuse box or another unused power source which provides (+)12V only when the ignition is turned on or in the accessory position.

**CAUTION:** You must be very careful when connecting wires to the vehicle's electrical system. Be sure you do not interface leads that are being used for factory components in the vehicle (like an on-board computer). When making connections at the fuse box, make sure there is an appropriate value fuse on the circuit you plan to use. Failure to do so may result in damage to the unit and/or the vehicle.

- **Battery Lead (YELLOW)**  
Connect this lead to the positive (+) terminal of the vehicle's battery.
- **Ground Lead (BLACK)**  
Connect this lead to a good chassis ground on the vehicle. Make sure the connection is made to bare metal and is securely fastened using the sheet metal screw provided.
- **Battery Power Supply Extension Lead for Audio Only**
- **Ground Lead for Audio Only**

## CONNECTIONS



## OPERATION

- To tune to higher frequencies, press the M.S./CD button on the top (UP) ⑳. To tune to lower frequencies, press this same button on the bottom (Down) ㉑.

### Auto SEEK Tuning

- Press the TUNE button ⑪ until the SEEK indicator ㉒ appears in the display.
- Select the tuning band with the BAND button ⑩.
- Press the UP ㉓ or Down ㉔ button. The unit automatically tunes to the next higher or lower frequency and locks on that station.

### Manual Memory Preset

Follow the instructions below to program stations into preset memory.

- Select the tuning band (FM1, FM2, or AM) with the BAND button ⑩.
- Tune in your desired station by manual or Auto SEEK tuning.
- Press and hold any Preset button ㉕ for more than two seconds. The tuned frequency in the Digital Display ⑧ will begin to blink. Press that button a second time while the indicator is blinking (within five seconds).
- Your selected station will be placed into that preset location and the indicator will light.

**Note:** If a preset memory has already been programmed in that location, it will be cleared and the new station will replace the old preset.

### Auto MEMORY Preset

- Press the TUNE button ⑪ to light up the A. MEMO indicator ㉖.
- Select the desired tuning band (FM1, FM2 or AM) with the BAND button ⑩.
- Press the UP ㉓ or DN ㉔ button. The tuner will automatically seek the six strongest stations in each band and memorize them in order of the signal strength. These stations are automatically placed in the preset memory with the strongest station in Preset No. 1 and the 6th strongest station in Preset No. 6. When seeking stations, the tuner first seeks in the local tuning mode. If less than 6 stations are memorized, the tuner seeks again in the distance (DX) mode.
- After finishing the Auto MEMORY Preset, the tuner goes to the station placed in preset memory No. 1. If no stations are memorized, it returns to the original station you were listening to before the Auto MEMORY Preset procedure began. When the auto memory presetting is completed, the A. MEMO indicator ㉖ will disappear and the SEEK indicator ㉒ will appear.

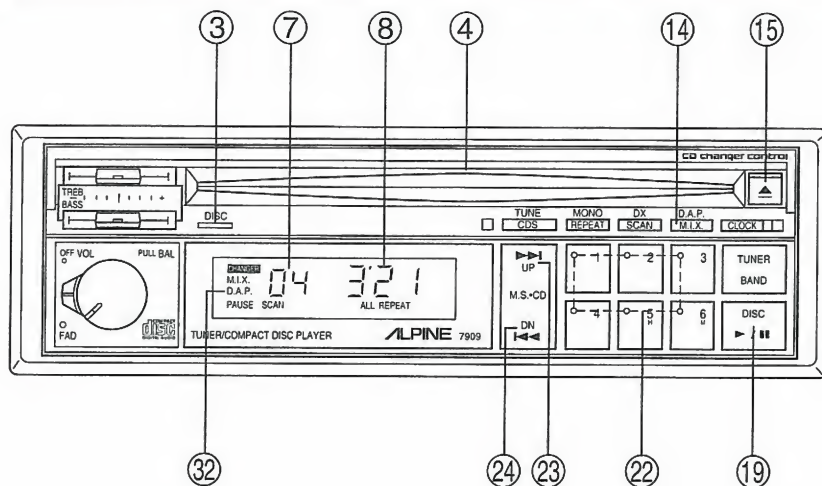
### Preset Tuning

After the preset stations have been memorized, you can tune in your desired station (within the band displayed) with one touch of a button.

- Select the tuning band (FM1, FM2 or AM) with the BAND button ⑩.
- Press any one of the Preset buttons ㉕ and the indicator in that button will light.
- The frequency of the station placed in the selected preset location will appear in the display.



## OPERATION



### D.A.P. (Direct Access Preset)

This feature allows the storage of FM and AM presets on the same band. Press the D.A.P. button 14 to light up the D.A.P. indicator 32. To program stations into the D.A.P. band, follow steps 1 – 3 as described in the Manual Memory Preset section on page 13.

### Accessing the D.A.P. Presets

1. Press the D.A.P. button 14. The D.A.P. indicator 32 will illuminate in the display.
2. Press one of the Preset buttons 22 and the indicator in that button will light.
3. The frequency of the station placed in the selected D.A.P. location will appear in the display.

### <CD OPERATION>

If the unit is not in the CD mode, press the DISC button 19.

### Load

1. Insert a disc into the Disc Slot 4. When the disc is halfway in, the power loading system will pull the disc in and guide it into the play position.
2. If the disc is left at least halfway in, press the DISC button 19 or press the disc edge lightly to move it forward. "LOAD" will show in the display 8 while loading.
3. When the unit is in the CD mode, the Digital Display shows "00 0'00" for a second while the data on the disc is read.
4. When a disc is loaded while the unit is in the tuner mode, it will automatically switch to the CD mode.

## INSTALLATION

1. The bracket stopper is already mounted. (Fig. 1)
2. Slide mounting sleeve from main unit.  
Slide the mounting sleeve into the dashboard. (Fig. 2)
3. Connect each input lead coming from an amplifier or equalizer to the corresponding output lead coming from the left rear of the 7909.  
Connect all other leads of the 7909 according to details described in the CONNECTIONS section.
4. When the unit is in place, push the tip of the locking pins up to the horizontal position using a screwdriver. Now the unit is locked in.
5. Snap the front trimplate on around the front end of the unit.

### NOTE:

Reinforce the head unit with the metal mounting strap supplied. Secure the ground lead of the unit to a clean metal spot using a screw (★) already attached to the car chassis.

For the screw marked ★★, use an appropriate screw for the chosen mounting location.

- To remove your unit, first remove the front trimplate. (Lift the top part carefully with a flat screwdriver for easy removal). Insert the pair of keys provided all the way into the grooves on each side of the unit and pull the unit out. (Fig. 3)
- Should now be securely, your unit should be secure in place. If you wish to reinforce the installation, use the metal mounting strap supplied and follow the procedures shown in Fig. 4.

### Installation Location

The 7909 is designed for in-dash mounting. For optimum performance, make sure the player will not be exposed to:

1. Direct sun and heat
2. High humidity
3. Excessive dust
4. Excessive vibrations.

### IMPORTANT

Please record the serial number of your unit in the space provided on the back cover of this manual and keep it as a permanent record. The serial number plate is located on the bottom of the unit.



## INSTALLATION

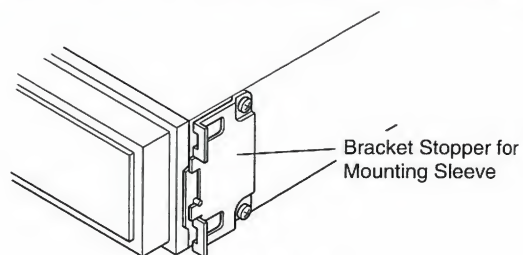


Fig. 1

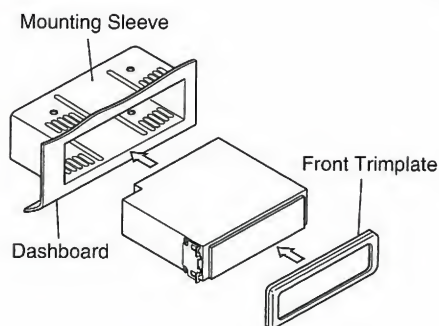


Fig. 2

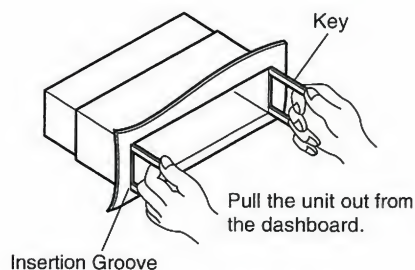


Fig. 3

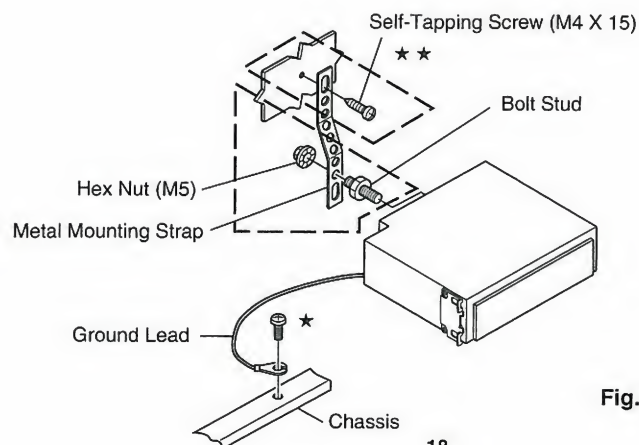


Fig. 4

## OPERATION

### Disc Indicator

This indicator ③ lights red when a 3-inch disc is loaded, and green when a 5-inch disc is loaded.

### Disc Eject and Reload

Press the EJECT button ⑮. The Digital Display ⑧ will show "EJEC" for a second, then the disc will come halfway out. If a 5-inch disc is left in this position for more than 15 seconds the self loading system will be automatically actuated and the disc will be reloaded into the mechanism and the player will be set to the pause mode. Press the DISC button ⑰ to resume playback.

When using 3-inch discs, the disc will remain ejected until it is pushed back in.

### Pause

Press the DISC button ⑰ to hold playback temporarily. The playback stops, but the disc remains inside the player. To resume playback, press the DISC button ⑰ again.

### Music Sensor (Skip)

This feature allows you to access the beginning of your musical track selection simply and quickly. It is functional in the play or pause mode. The display ⑦ shows the track number you have selected.

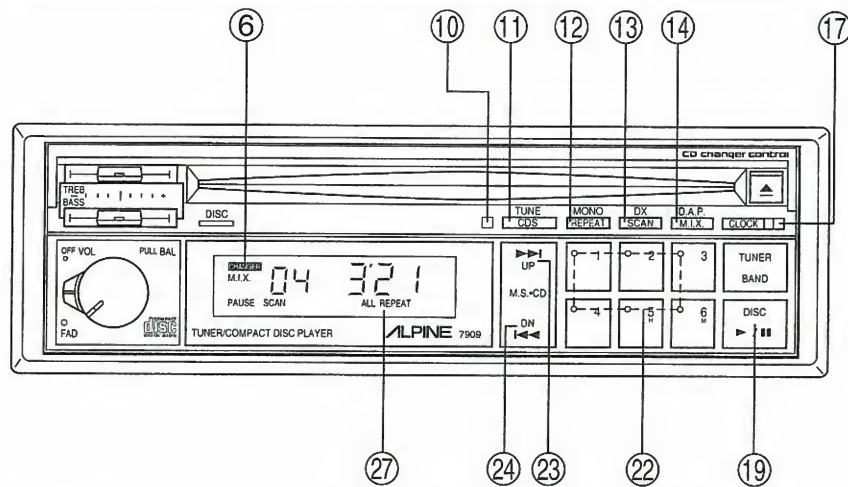
- \* To advance to the next track on the disc, press the ►► side of the M. S. button ②③.
  1. Playback stops, the pickup moves up to the beginning of the next track. That track number appears in the display ⑦.
  2. Playback begins immediately.
  3. If you wish to access a track further ahead on the disc, continue pressing the ►► side of the M.S. button ②③ until you reach the track of your choice.
- \* To replay the track that is currently playing, press the ◀◀ side of the M.S. button ②④.
  1. Playback stops, the pickup moves back to the beginning of the current track. The track number in the display ⑦ remains the same.
  2. Playback begins immediately from the beginning of the track.
  3. If you access a track further toward the beginning of the disc, continue pressing the ◀◀ side of the M.S. button ②④ until you reach the track of your choice.

### Fast Forward/Fast Backward

The Fast Forward/Fast Backward feature works in the play mode.

1. Press either the M.S. ►► ②③ or the M.S. ◀◀ ②④ button and hold it for more than one second.
2. To move the pickup forward rapidly, hold down the M.S. UP ►► button ②③.
3. To move the pickup backward rapidly, hold down the M.S. DN ◀◀ button ②④.
4. Release the button when you get to the desired position on the disc.

## OPERATION



- When the pickup reaches the end of the disc, it automatically returns to the beginning. Playback will then start from the beginning of the disc.

### REPEAT (One)

This feature allows you to continuously play back a single track.

- Press the REPEAT button ⑫. The REPEAT indicator ⑳ shows in the display.
- The musical track shown in the display will be played back repeatedly.
- To defeat the Repeat function, press the REPEAT button ⑫ a second time.

### SCAN

Press the SCAN button ⑬ and the player will play back the first 10 seconds of each track in succession. This function is useful in searching for a specific program ahead on a disc. Press the SCAN button ⑬ a second time to deactivate this function.

### M.I.X. (Random Play)

Depress the M.I.X. button ⑭ while in the CD mode and the musical tracks will be played back in a random sequence generated by the microprocessor. After all the tracks on the disc have been played back once, the player will begin a new random sequence. Press the M.I.X. button ⑭ a second time to deactivate this function.

### CDS (CD Straight)

Press the CDS button ⑩ to activate the CDS mode. The CDS indicator ⑪ will light. To prevent the introduction of noise into the signal, the tone and balance circuits are bypassed. This ensures that only the quietest, most dynamic and natural sound will be heard. Press the CDS button ⑩ a second time to deactivate this function.

**Note:** When using the 7909 as a controller for the Alpine CD changer, the CDS functions only with the internal CD player.

## OPERATION

### <CD CHANGER OPERATION>

The following instructions apply only to systems that incorporate the Alpine CHM-S601 or CHA-S604 CD changer (option) with the 7909.

### Initial System Turn-On

When operating the system for the first time after installation or after the vehicle's battery has been disconnected and reconnected, press the Reset switch ⑰ with a mechanical pencil or other pointed object.

Turn the unit on and access the CD Changer mode by pressing the DISC button ⑱ for more than 2 seconds. The CHANGER indicator ⑥ shows in the display.

### Direct Disc Access

- Press one of the Direct Disc Access buttons ⑳ to select from discs 1 – 6. The indicator in that button lights. The track number and the elapsed time will appear in the display.
- Press the M.S./CD UP ㉓ or DN ㉔ button for musical track selection.

### REPEAT (One/All)

This feature allows you to continuously repeat a single track or one entire disc.

### To Repeat a Single Track

- Locate the music track of your choice using the M.S./CD UP ㉓ or DN ㉔ button.
- Press the REPEAT button ⑫. The REPEAT indicator ㉗ will illuminate. The music track will be played back repeatedly.
- To stop repeat play, press the REPEAT button ⑫ twice. The indicator switches from "REPEAT" to "ALL REPEAT" and the illumination will be off.

### To Repeat an Entire Disc

- While playing a disc, press the REPEAT button ⑫ until the "ALL REPEAT" indicator ㉗ is displayed.
- The disc will be played back repeatedly.
- To stop repeat play, press the REPEAT button ⑫ once. The indicator illumination will be off.

For other operations for the CHM-S601 or CHA-S604 CD Changer, refer to the CD OPERATION section on pages 14 through 16.

If no sound is heard during operating, proceed the next procedures.

- Set the volume to minimum.
- Press the Reset switch ⑰ with a mechanical pencil or other pointed object.